CH2M HILL Hanford Group, Inc.	Manual	Management Plan
	Document	TFC-PLN-40, REV C
HOISTING AND RIGGING SAFETY	Page	1 of 9
MANAGEMENT PROGRAM PLAN	Issue Date	November 9, 2006
	Effective Date	November 9, 2006

Ownership matrix

1.0 PURPOSE AND SCOPE

(4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5)

This program plan describes the CH2M HILL organizational roles and responsibilities for implementing "Hanford Site Hoisting and Rigging Manual," <u>DOE-RL-92-36</u>. This program plan supplements but does not duplicate or replace DOE-RL-92-36.

This program plan applies to CH2M HILL and subcontracted organizations that operate hoisting and rigging equipment or perform hoisting and rigging activities for CH2M HILL under DOE-RL-92-36.

NOTE: Forklifts are a part of the requirements for DOE-RL-92-36 and are included in this plan.

2.0 ROLES AND RESPONSIBILTIES

Each director, manager, or organization assigned specific responsibilities below, shall develop implementing procedures as needed. The Safety Programs Manager (document owner of this procedure), will work with the organization in the development plans, procedures, or other documents that implement the hoisting and rigging program for CH2M HILL.

NOTE: Some of the titles used within this procedure are specific to hoisting and rigging program activities and do not necessarily represent an individual's official job title. To identify a specific individual in relation to their responsibility, as defined within this plan, refer to the CH2M HILL Hanford Safety Program web page.

2.1 CH2M HILL Safety and Health Director

The CH2MHILL Safety and Health Director is the functional area manager for this program plan, and is identified within the Documented Safety Analysis (DSA) Safety Management Program as the hoisting and rigging manager.

The Safety and Health Director is responsible for:

- Ensuring that all hoisting and rigging operations and activities performed by CH2M HILL or subcontractor personnel, are compliant with DOE-RL-92-36.
- Appointing the Safety Programs Manager as document owner of this program plan and for hoisting and rigging activities.

HOISTING AND RIGGING SAFETY MANAGEMENT PROGRAM PLAN

2.2 Safety Programs Manager

The Safety Programs Manager performs the following duties:

- Serves as the CH2M HILL authority for the review and communication of revisions to the Hanford Site Hoisting and Rigging Manual;
 - Notifies line organizations of revisions to the Hanford Site Hoisting and Rigging Manual or when H&R bulletins, lessons learned, and important issues are received
 - Assists line organizations in addressing hoisting and rigging compliance issues
- Oversees and supports CH2M HILL hoisting and rigging activities, including the review and approval of procedures implementing this plan or the Hanford Site Hoisting and Rigging manual
- Reviews and approves hoisting and rigging safety program procedures
- Reviews, approves, and provides oversight of all construction subcontracts providing hoisting and rigging equipment or services
- Identifies safety professionals for supporting and approving hoisting and rigging activities
- Ensures qualifications of CH2M HILL and subcontractor personnel identified to perform hoisting and rigging activities
- Serves or assigns a designee as the CH2M HILL representative for the Hanford Site Hoisting and Rigging Committee
- Chairs the CH2M HILL Hoisting and Rigging Committee
- Performs an annual management assessment of the hoisting and rigging program
- Performs or directs routine surveillances to verify line organization implementation of the Hoisting and Rigging program
- Participate in (or delegate) incident/accident investigations involving hoisting and rigging equipment or services

NOTE: Leadership of incident/accident investigations shall typically be performed by a designated representative of the line organization responsible for directing the hoisting and rigging work activities at the time of an event in accordance with the requirements of TFC-OPS-OPER-C-14

• Supports the maintenance of the Hoisting and Rigging Training Program Description (TFC-BSM-TQ-STD-18) to ensure compliance with the Hanford Site Hoisting and

HOISTING AND RIGGING SAFETY

MANAGEMENT PROGRAM PLAN

Rigging manual and to establish specific CH2M HILL training and qualification requirements for hoist and rigging activities.

2.3 Operations Maintenance Managers (Closure Operations, Waste Feed Operations, and Analytical Technical Services)

The operation maintenance managers shall perform the following:

- Designate a Hoisting and Rigging Equipment Custodian to ensure inspections, tagging, maintenance and repair of company owned and leased hoisting and rigging equipment
- Document the assignment of a CH2M HILL hoisting and rigging equipment custodian by letter to the Safety Programs Manager
- Serve as members of the CH2M HILL Hoisting and Rigging Committee
- Lead or participate in all incident/accident investigations involving hoisting and rigging activities or services, as appropriate
- Notify the appropriate shift office and Safety Programs Manager after any hoisting and rigging event and prior to any critique or incident investigation
- Notify the WFO Projects director, crane coordinator, or blanket master agreement (BMA) buyer's technical representative (BTR), and the Fluor Hanford (FH) Hoisting and Rigging manager of hoisting and rigging incidents that involve equipment and/or services procured from FH or another Hanford Site contractor
- Provide one week advanced notice to the crane coordinator and the FH Hoisting and Rigging manager (or assigned delegate) of any hoisting and rigging equipment needs or proposed equipment transfers
- Establish and communicate expectations, and reviews, approves, and provides oversight for all subcontracts for hoisting and rigging equipment or services.

2.4 Construction Forces Management

In the performance of oversight of construction forces subcontractor activities, Construction Forces Management performs the following:

- Establishes and communicates expectations and reviews, approves, and provides oversight for all construction subcontracts for hoisting and rigging equipment or services
- Verify that construction subcontractors perform inspections of hoisting and rigging equipment prior to use
- Ensures construction subcontractors establish controls maintaining their hoisting and rigging equipment used

NOTE: Subcontractors shall use the CH2M HILL equipment tagging program, or shall have an equivalent system approved by the Safety Programs Manager

- Verifies proper qualifications for CH2M HILL and construction subcontractor personnel performing hoisting and rigging activities
- Serve as a member of the CH2M HILL Hoisting and Rigging Committee
- Lead or participate in incident/accident investigations of all hoisting and rigging activities or services, as appropriate
- Notify the appropriate shift office and Safety Programs Manager, as soon as possible after any hoisting and rigging event
- Notifies the WFO Projects director, crane coordinator, or blanket master agreement BTR, and the Fluor Hanford (FH) Hoisting and Rigging manager of hoisting and rigging incidents that involve equipment and/or services procured from FH or another Hanford Site Prime contractor
- Provide one week advanced notice to the crane coordinator and the FH Hoisting and Rigging manager (or assigned delegate) of any hoisting and rigging equipment needs or proposed equipment transfers
- Establishes and communicates expectations, and reviews, approves, and provides oversight for all construction subcontracts for hoisting and rigging equipment or services.

2.5 Waste Feed Operations Projects, Hoisting and Rigging Program Manager

The WFO Hoisting and Rigging Operations program manager is responsible for the following activities:

- Serves as the single point-of-contact between CH2M HILL and FH on all hoisting and rigging issues
- Assigns a single crane coordinator to provide day-to-day scheduling of FH mobile crane support for operations, projects, and construction
- Ensures the field crane coordinator assigns cranes based on requirements and changing work priorities, including preventive maintenance.

2.6 CH2M HILL Hanford Organizations

All CH2M HILL Hanford organizations engaged in hoisting and rigging work activities are responsible for:

- Conducting all field hoisting and rigging activities in compliance with DOE-RL-92-36 and this management plan
- Complying with the Hanford Site Hoisting and Rigging Manual, Chapter 6, and TFC-BSM-TQ-STD-18 in all forklift operations
- Conducting periodic field oversight to ensure field activities are conducted, as planned

MANAGEMENT PROGRAM PLAN

TFC-PLN-40, REV C 5 of 9 November 9, 2006

- Notify the appropriate shift office and Safety Programs Manager after any hoisting and rigging event and prior to any critique or incident investigation
- Notify the WFO Projects director, crane coordinator, or blank master agreement BTR, and the Fluor Hanford (FH) Hoisting and Rigging manager of hoisting and rigging incidents that involve equipment and/or services procured from FH or another Hanford Site contractor
- Provide one week advanced notice to the crane coordinator and the FH Hoisting and Rigging manager (or assigned delegate) of any hoisting and rigging equipment needs or proposed equipment transfers.

2.7 Field Work Supervisors (FWS)

All CH2M HILL Hanford field work supervisors overseeing hoisting and rigging work activities are responsible for:

- Coordinating hoisting and rigging activities with the designated leader
- Understanding the overall job plan in order to coordinate other related activities in a safe manner
- Ensure that all hoisting and rigging work is performed safely and within the scope of the current work package
- Stopping the work in the event hazardous conditions develop that endanger personnel, equipment, or process.

2.8 Equipment Custodians

Equipment custodians are responsible for:

- Each overhead and shop crane, hoist, forklift truck, or other hoisting and rigging equipment that requires scheduled maintenance, inspections, and recordkeeping
- Tracking and scheduling and documenting all CH2M HILL hoisting and rigging equipment that requires scheduled maintenance or inspections
- Implementation of the equipment tagging program for CH2M HILL-owned or -leased hoisting and rigging equipment to ensure only equipment with a valid tag is used
- Performing duties as assigned in Section 2.2.8 of "Hanford Site Hoisting and Rigging Manual," DOE-RL-92-36

MANAGEMENT PROGRAM PLAN

- Maintaining training and qualifications as defined in the Hoisting and Rigging Training Plan
- The lead hoisting and rigging equipment custodian will maintain a maintenance history file for each piece of CH2M HILL rigging equipment, including:
 - Manufacturer's operation and maintenance manuals
 - Waivers applicable for replacement forks and fork inspections
 - Documentation for replacement forks and fork inspections
 - Inspection procedures and inspection records
 - Records of repair, modification, and overhauls.

2.9 Safety

Line safety organizations shall monitor hoisting and rigging operations to ensure safe performance. In addition, field safety professionals are responsible for the following:

- Perform the duties of the responsible safety organization as defined in Section 2.3.1 of the "Hanford Site Hoisting and Rigging Manual," DOE-RL-92-36
- When requested, approve critical lifts as specified in Chapter 3 of the Hanford Site Hoisting and Rigging Manual
- Review and approve hoisting and rigging processes in hostile environment plans as specified in Chapter 18 of the Hanford Site Hoisting and Rigging Manual
- Perform periodic field oversight and surveillance of hoisting and rigging activities to ensure safety compliance
- Participate in the annual management assessment for hoisting and rigging activities as assigned by the Safety Programs Manager
- Inspect all hoisting and rigging equipment owned or leased by CH2M HILL, and approve for use through the equipment tagging system implemented by the equipment custodians
- Oversee subcontractors inspections and the control of their hoisting and rigging equipment used on CH2M HILL work.

NOTE: Subcontractors shall use the CH2M HILL equipment tagging program, or shall have an equivalent system approved by the Safety Programs manager for hoisting and rigging operations.

HOISTING AND RIGGING SAFETY

MANAGEMENT PROGRAM PLAN

2.10 Quality Assurance

Quality Assurance is responsible for the following:

- Perform periodic surveillances of hoisting and rigging equipment and operations
- Participate in the annual management assessment for hoisting and rigging activities, as assigned by the Safety Program manager.

2.11 Training Department

The Training department is responsible for the following:

- Perform the training organizations responsibilities as defined in Section 2.3.2 of the "Hanford Site Hoisting and Rigging Manual," DOE-RL-92-36
- Serve as a member of the CH2M HILL Hoisting and Rigging Committee
- Participate in the development of the company Hoisting and Rigging Training Program
 Description consistent with the requirements specified in Hanford Site Hoisting and
 Rigging Manual.
- Training and Qualifications of personnel on Hoisting and Rigging, including Forklifts is found in TFC-BSM-TQ-STD-18.

2.12 Engineering Department

The Engineering department is responsible for the following:

- Assign qualified rigging engineers
- Assign the lead rigging engineer to serve as a member of the CH2M HILL Hoisting and Rigging Committee and the Hanford Hoisting and Rigging Committee
- Provide rigging engineering services, as required, including the design of lifts plans
- Provide engineering support for the structural evaluation of lifting points, including the maintenance of the lifting point database
- Review and approve critical and special lift plans.

A qualified rigging engineer shall review and approve the procurement of all hoisting and rigging equipment prior to authorizing/commencing work or placing equipment in service.

MANAGEMENT PROGRAM PLAN

2.13 Production Planning & Control/Analytical Technical Services Work Control

Production Planning & Control and Analytical Technical Services Work Control are responsible

- Ensuring that all hoisting and rigging work is planned in compliance with Hanford Site Hoisting and Rigging Manual, this plan, and other hoisting and rigging implementing procedures
- Ensuring that planners and others involved with planning hoisting and rigging activities are trained in accordance with Hanford Site Hoisting and Rigging Manual.

2.14 WFO Projects Hoisting and Rigging Blank Master Agreement Buyer's Technical Representative

The hoisting and rigging blank master agreement BTR is responsible for the following:

- Procure hoisting and rigging services and equipment in accordance with the provisions of the Hanford Site Hoisting and Rigging Manual and the CH2M HILL - Fluor Hanford Memo of Agreement
- Coordinate with the project safety professional for equipment inspections prior to the use of any equipment leased, purchased, or contracted
- Obtain Safety Programs manager approval on all procurements of hoisting and rigging equipment and services.

3.0 **RECORDS**

No records are generated in the performance of this management plan.

4.0 **SOURCES**

4.1 **Requirements**

- 1. 29 CFR 1910, "Occupational Safety and Health Standards."
- 2. 29 CFR 1926, "Safety and Health Regulations for Construction."
- 3. DOE-RL-92-36, "Hanford Site Hoisting and Rigging Manual." (S/RID)
- 4. TFC-PLN-02, "Quality Assurance Program Description."
- 5. TFC-PLN-32, "Tank Farm Contractor Safety Management Programs."

4.2 References

- 1. ASME B-30 Series, "Safety Standards Committee for Cableways, Cranes, Derricks, Hoists, Hooks, Jacks, and Slings."
- 2. ASME B56.1, "Safety Standard for Low Lift and High Lift Trucks."
- 3. ASME B56.6, "Safety Standard for Rough Terrain Forklift Trucks."
- 4. DOE-STD-1090-2001, "Hoisting and Rigging Standard."
- 5. TFC-CHARTER-31, "Hoisting and Rigging Committee Charter."
- 6. TFC-ENG-DESIGN-C-22, "Structural Integrity Verification of Lifting Points."
- 7. TFC-ENG-DESIGN-C-23, "Inspection of Permanent Lifting Points."
- 8. TFC-BSM-TQ-STD-18, "Hoisting and Rigging Training Program Description."
- 9. TFC-OPS-MAINT-C-11, "Maintenance and Administration of Tank Farm Contractor Hoisting and Rigging Equipment."
- 10. TFC-OPS-OPER-C-14, "Event Investigation Process."